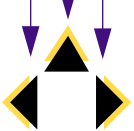
Find and Replace Introduction

Welcome to CodeWarrior.

This tutorial is designed to introduce the basic features and functionality of the CodeWarrior Find and Replace capabilities. The Find and Replace search engine is a major part of the CodeWarrior Integrated Development Environment (IDE).

Using the Controls

Use these three controls to move through this tutorial.



Previous

Click to move to the previous page.

Return to Topics

Click to return to the main topics page.

Next

Click to move to the next page.

Adobe Acrobat

The standard Adobe Acrobat commands are also available on the View menu.

Find and Replace Overview

Before you get started, take a moment to review the information provided in this introduction. It may answer some of the questions you have on using this tutorial. The topics include:

- Using the Controls
- Find and Replace Topics
- Required Knowledge
- Intended Audience
- Taking the Tour
- Host Conventions
- Where Else to Go Tutorials
- Where Else to Go Documentation

Find and Replace Topics

This tutorial has two purposes. First, it introduces the CodeWarrior's Find and Replace features. Second, it guides you through common actions you need to know to effectively use CodeWarrior's Find and Replace features. This tutorial includes:

- Find and Replace Tour
- STAGE 1: Find Window Tour
- STAGE 2: Find and Replace Actions
- Multi-File Find and Replace Tour
- STAGE 3: Multi-File Find Window Tour
- STAGE 4: Multi-File Find and Replace Actions
- STAGE 5: Using File Sets

Required Knowledge

This tour assumes that you have a basic understanding of using your computer system. If you are just getting started with computers, refer to the user guide that came with your computer system. Once you feel comfortable with using your computer, come back and start again.

NOTE: The CodeWarrior tutorials are designed to teach you how to use CodeWarrior to successfully create, compile, and debug executable code. These tutorials will not teach you how to program a computer. If you wish to learn programming, visit your local bookstore for beginning programming books, see your local community college for classes on programming, or refer to the 3rd-party documentation that may be provided on your CodeWarrior CD.

Intended Audience

The Find and Replace (Basic) tutorial is intended for all first-time code warriors. If you have not already taken the Guided Tour tutorial, we recommend that you take a few minutes to go through that tutorial before continuing here. The Guided Tour will give you an overview of the entire CodeWarrior IDE.

Beginning Programmers

If you are just beginning your career as a programmer then you are in for a treat. The CodeWarrior environment provides all the tools you need for any programming task, from simple applications to advanced professional-quality programs. Go through this tour, then follow the recommendations at "Where Else to Go Tutorials" to continue your explorations of CodeWarrior.

more…

Intended Audience (continued)

Experienced Programmers

After taking the Guided Tour tutorial, experienced programmers new to CodeWarrior should refer to this and the other tutorials for in-depth knowledge about the various components of the CodeWarrior environment. Many CodeWarrior Targeting manusl include basic tutorials that demonstrate how to use the tools to program for a particular platform.

Taking the Tour

The CodeWarrior tutorials are designed to help you become familiar with the CodeWarrior IDE. This tutorial consists of a series of stages. Each stage, in turn, is a series of slides, like this one. Each slide describes a feature or a task you can perform. You will gain the most benefit from these tutorials if you follow along with the CodeWarrior IDE while reading and performing the actions described in the tutorial.

To Use a Tutorial:

1. In Acrobat Reader 3.0, read the text on a slide.
2. If actions are described (example: Choose Open from the File menu), then switch to the CodeWarrior IDE.
3. In the CodeWarrior IDE, perform the action.
4. Switch back to Adobe Acrobat Reader, read the next action.

NOTE: Both Adobe Acrobat Reader and the CodeWarrior IDE must be running.

Host Conventions

Hosts: While the CodeWarrior IDE runs on several different host platforms, the functionality on these host platforms is not always identical. There are occasions when a feature is implemented for one or more hosts and not for others. This tutorial only demonstrates features found on all supported hosts.

Pictures: The IDE's visual interface on these hosts is nearly identical in all significant respects. When discussing a particular interface element such as a dialog box or window, the screenshot may come from any host. If you are using CodeWarrior on a different host, you should have no difficulty understanding the picture.

Keyboard: The default keyboard shortcuts for CodeWarrior on these platforms are very similar. However, keyboards and shortcuts do vary across host platforms. For example, a typical keyboard for a Windows machine has an Alt key, but a typical keyboard for a Mac OS computer calls the same key the Option key

more…

Host Conventions (continued)

To handle these kinds of situations, CodeWarrior documentation identifies and uses the following paired terms in the text:

- `Enter/Return` - the “carriage return” or “end of line” key. This is not the numeric keypad Enter key, although in almost all cases that works the same.
- `Backspace/Delete` - the key that (in text editing) causes the character before the insertion point to be erased (not to be confused with `Delete/Del`, the “forward delete” key)
- `Ctrl/Command` - in most cases, CodeWarrior maps the Windows Ctrl key the same way as the Mac OS Command key.
- `Alt/Option` - in most cases, CodeWarrior maps the Windows Alt key the same way as the Mac OS Option key.

For example, you may encounter instructions such as “Press `Ctrl/Command+S` to save a file,” or “Alt/Option click the Function pop-up to see the functions in alphabetical order." Use the appropriate key as it is labeled on your keyboard.

Where Else to Go Tutorials

Once you have finished this tutorial, be sure to explore the other CodeWarrior tutorials, and the documentation that accompanies this product. For an overview of the IDE, see:

- Guided Tour–overview of the CodeWarrior IDE
- Project Manager (Basic)–introduces the Project Manager
- Editor (Basic)–introduces the CodeWarrior Editor
- MW Debugger (Basic)–introduces debugging features

Where Else to Go Documentation

To learn more about programming for a particular target operating system or processor, see the corresponding CodeWarrior Targeting manual. The CodeWarrior Find and Replace features are also documented in:

- IDE User Guide–documents IDE components, including Find and Replace.

Getting Started

Phew! Now that all of the preliminaries are out of the way, its time to explore the CodeWarrior's Find and Replace features.

Find and Replace Tour

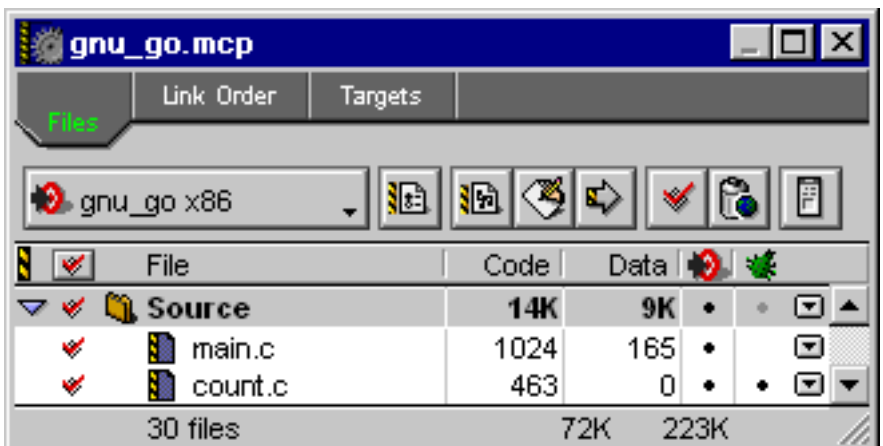
This section of the tutorial identifies the components of the Find and Replace window and describes their use.

Along the way we will cover:

- STAGE 1: Find Window Tour
- STAGE 2: Find and Replace Actions

Getting Ready

You will use the `gnu_go.mcp` project file in this tutorial. If you don't already have it open, please open the project now. The `gnu_go.mcp` project file is located in the `Source Examples` folder inside the `Core Tutorials` folder.



If you don't know how to open a project file, see the Guided Tour tutorial.

Find Window Tour

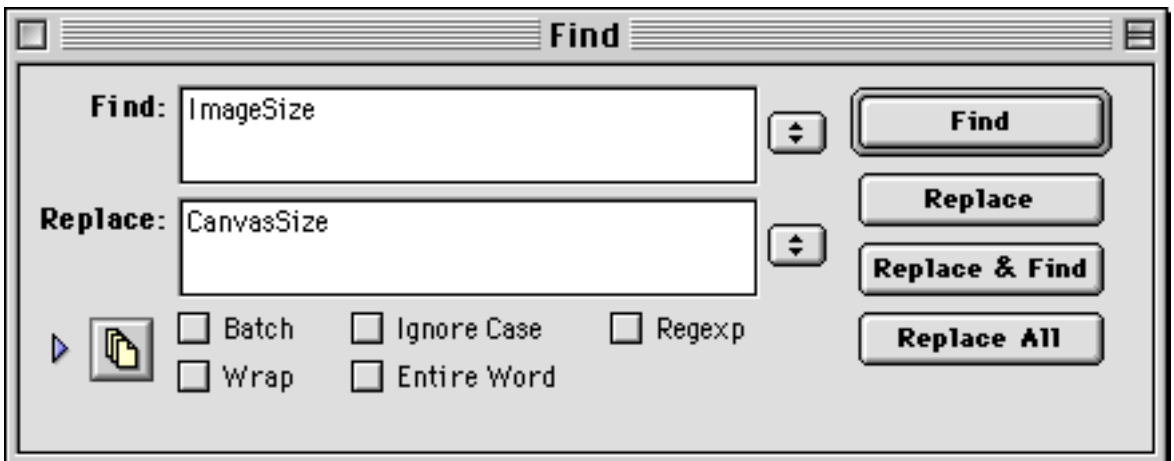
This section of the tutorial identifies and describes the components that appear in the Find window as shown in Find Window.

Along the way you will identify and use the:

- Text Fields and Pop-ups
- Search Controls
- Search Option Checkboxes
- Other Options

Find Window

The Find window appears as shown below:



Text Fields and Pop-ups

Before you can find or replace text in an Editor window, you must define the find and replacement strings. You can enter the strings directly into the appropriate fields, copy and paste text, drag a text selection, or choose from a pop-up menu of recent strings. The fields and pop-up menus include:

Find–enter text you want to search for in the Find text field.

Replace–enter text in the Replace field that will replace any matches identical to the text in the Find field.

Recent String Pop-ups–use the Recent Strings pop-up to the right of the Find or Replace fields to choose from recently entered strings.

TIP: You can also enter a search or replace string directly using a keyboard equivalent. See the “IDE User Guide” for more information.

Search Controls

Once you have entered text into the **Find** and **Replace** fields, you control the search using these buttons:

Find–use the **Find** button to initiate a search.

Replace–use the **Replace** button to replace any found text with the contents of the Replace field.

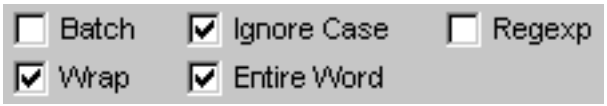
Find & Replace–use the **Replace & Find** button to replace any found text with the contents of the Replace field, then start the search again seeking the next match.

Replace All–use the **Replace All** button to replace all found text with the contents of the Replace field

NOTE: There are keyboard shortcuts for all of these commands. Use them for greater efficiency.

Search Option Checkboxes

The Find window includes these options which enable you to customize the search operation:



Batch–enable the Batch option to display the results of the search in a separate message window.

Wrap–enable the Wrap option to cause the search to continue at the beginning of the file when it reaches the end of the file.

Ignore Case–enable the Ignore Case option to disregard the case of the text during the search.

Entire Word–enable the Entire Word option to ignore instances of the Find string when they occur inside other words.

Regexp–enable the Regexp option to interpret the string in the Find field as a regular expression.

Other Options

The following controls are used with the Multi-file Search options:

Multi-file Search Disclosure Triangle–click this button to expand or collapse the Multi-file Search section of the Find dialog. See Multi-File Search Controls for additional information.

Multi-file Search Button–click this button to activate or deactivate the Multi-file Search option. See Multi-File Search Activation and Deactivation for additional information.

Summary

This concludes the Find Window Tour stage of this tutorial.

In this stage you learned how to:

- Identify the Find and Replace text fields, and the Recent Strings pop-up
- Identify the Search controls: Find, Replace, Replace & Find, and Replace All
- Identify the five Search option checkboxes
- Identify the the Multi-File Search and Disclosure Triangle buttons

Now that you can identify all of the Find window components, its time to actually find some text.

Find and Replace Actions

This section of the tutorial identifies and describes the other components that appear in an Find window.

Along the way you will identify and use the:

- Opening and Closing the Find Window
- Finding Text
- Replacing Text
- Replace & Find Text
- Replacing All Text Occurrences
- Batch Searching for Text

Opening and Closing the Find Window

Although you can control most aspects of a search from the keyboard, typically you will open the Find window before beginning a search. In this step you open and close the Find window.

To Open the Find Window:

- Choose **Find** from the **Search** menu, **OR**
  Type the keyboard shortcut `Ctrl/Command+F`.

To Close the Find Window:

- Choose **Close** from the **File** menu, **OR**
  Click the close box for the Find window, **OR**
  Type the keyboard shortcut `Ctrl/Command+W`.

Finding Text

With the Find window visible, you can search for text. In this step you search for the string in the `main.c` file. Make sure the `main.c` file is already open in an Editor window before continuing.

To Find Text:

1. Enter the search string into the **Find** field.

   For this example, type "`exambord`" in the field.

2. Set the search option checkboxes.

   For this example, none of the checkboxes should be enabled.

3. Click **Find**, **OR**
   Press the `Enter/Return` key.

   The IDE searches the active editor window for the Find string. If a match is found, the editor window scrolls to display the selected string. If no match is found, you'll hear a beep indicating failure.

Replacing Text

Once you've found your search text, you may need to replace it with soemthing entirely different. To accomplish this, use **Replace**. In this step you replace the variable named `exambord` with one called `chekbord` in the `main.c` file.

To Replace Text:

1. Enter the replacement string into the **Replace** field.

   For this example, type "`chekbord`" in the field.

2. Click **Replace**, **OR**
   Press the `Enter/Return` key, **OR**
   Type the keyboard shortcut `Ctrl/Command+=` (equal).

   The selected text is replaced by the replacement string.

Replace & Find Text

Once a match is found, you can replace the selected text with the replacement text and search for the next match. This enables you to selectively search and replace only specific instances of the search string.

To Replace & Find Text:

With a search string match already selected:

- Click **Replace & Find, OR**
  Choose **Replace & Find Next** from the **Search** menu, **OR**
  Type the keyboard shortcut `Ctrl/Command+L`.

  The selected text is replaced by the replacement string and the search starts for the next match.

Replacing All Text Occurrences

Occasionally, you may need to replace all instances of a search string with the replacement string. This is easy to accomplish using **Replace All**.

To Replace All Text Occurrences:

1. Enter your search and replacement strings.
2. Set the search option checkboxes.

   Enable the search option checkboxes.
3. Click **Replace All**.

   All occurrences of the search text is replaced by the replacement text in the editor window.

WARNING: Performing a Replace All action is not undoable.

Batch Searching for Text

??

In this step you perform a batch search of the `main.c` file. The find string should still read `exambord`.

To Perform a Batch Search

1. Enable the **Batch** checkbox.
2. Click **Find**, **OR**
   Choose **Find** from the **Search** menu, **OR**
   Type the keyboard shortcut `Ctrl/Command+F`.

   The IDE searches for all occurances of the find string and displays them in a Search Results window. You then click on any occurance of the find string to go directly to the string's location. Or double-click an occurance to open the file and display the matching string.

Summary

This concludes the Find and Replace Actions stage of this tutorial.

In this stage you learned how to:

- Find text
- Replace text
- Find & Replace all text occurances in a document
- Perform a batch search for a string

Now that you can identify and use all of the Find and Replace components, its time to explore the actions you can perform within an Editor window.

Multi-File Find and Replace Tour

This section of the tutorial identifies the components of the Multi-File Find and Replace window, and describes their use.

Along the way we will cover:

- STAGE 3: Multi-File Find Window Tour
- STAGE 4: Multi-File Find and Replace Actions
- STAGE 5: Using File Sets

Multi-File Find Window Tour

This section of the tutorial identifies and describes the components that appear in the Multi-File Search portion of the Find window.

Along the way you will identify and use the:

- Multi-File Search Controls
- Multi-File Search Activation and Deactivation
- Multi-File Search Pop-ups
- Multi-file Search Checkboxes

Multi-File Search Controls

In this step you learn how to expand and collapse the Multi-File Search section of the Find window. You control this with the Multi-File Disclosure Triangle.

To Show the Multi-file Search section:

- Click the Multi-File Disclosure triangle (▷) in the Find window.

  The Find window expands to display the Multi-File Search section and the disclosure triangle rotates to point downward. See "Multi-File Section of Find Window" on page 34.

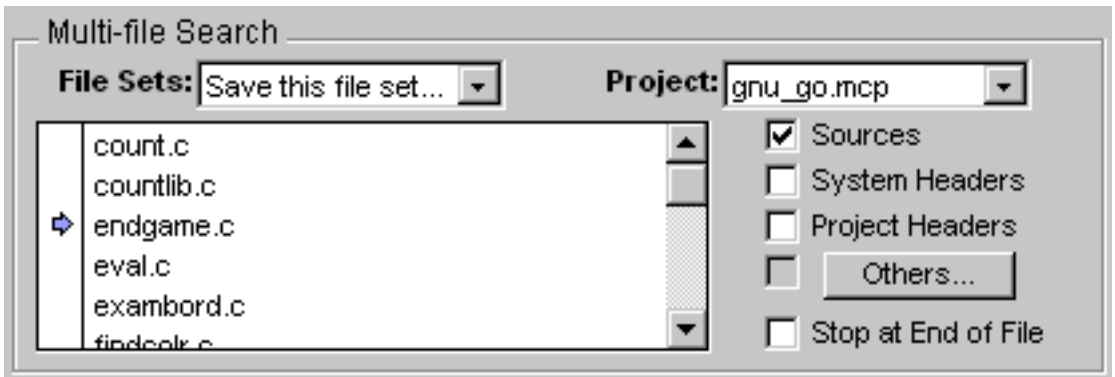
To Hide the Multi-file Search Options:

- Click the Multi-File Disclosure triangle (▽) in the Find window.

  The Find window collapses the Multi-File Search section and the disclosure triangle rotates to point right.

Multi-File Section of Find Window

The Multi-File section of the Find window appears as shown below:



Multi-File Search Activation and Deactivation

In this step you learn how to activate and deactivate the Multi-File Search option. You control this with the Multi-File Search button, which is a push button.

To Activate Multi-File Search:

- Click the Multi-File Search button.

  Multi-File Search is activated and the image appears pushed in.

To Deactivate Multi-File Search:

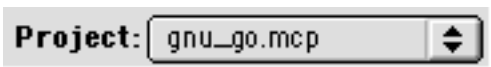
- Click the Multi-File Search button.

  Multi-File Search is deactivated and the image pops back out.

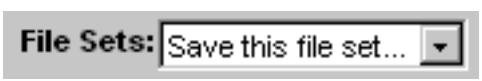
Multi-File Search Pop-ups

A multi-file search looks through a specified list of files. You can create a list manually, or use a previously saved set of files. When you build a file list, there are easy ways to add files from a project. Because the IDE can have several projects open simultaneously, you must specify which project to use.

Project–Use the Project pop-up to choose which project to use when adding files to a file set.



File Sets–selects a file set to use for multi-file searching. It also enables you to Create a File Set or Remove a File Set from the **File Sets** pop-up menu.



Multi-file Search Checkboxes

You control which files are included within the file list using the following checkboxes:

Sources–adds or removes all source files used by the current project.

System Headers–adds or removes all system interface files used by the current project.

Project Headers–adds or removes all project interface files used by the current project.

Others–adds other files to the file list. When enabled, you click the now active Others button.

Stop at End of File–enable this option to stop searching at the end of each file. You can continue the search using the **Find Next** command. When disabled, the entire file list is treated as a single file.

Summary

This concludes the Multi-File Find Window Tour stage of this tutorial.

In this stage you learned how to:

- Hide and show the Multi-file search options
- Activate and deactivate the Multi-File search options
- Identify the use of the File Sets and Projects pop-ups
- Identify the use of the project options

Now that you can identify and use all of the Multi-File Search components, its time to explore the actions you can perform with it.

Multi-File Find and Replace Actions

This section of the tutorial describes the Multi-File Search actions you can perform with the extended Find window.

Along the way you will learn:

- Multi-file Search Actions
- Adding & Removing Files
- Adjusting Search Order

Multi-file Search Actions

With some additional setup, a Multi-file search is performed exactly as is a single file search.

To Perform a Multi-file Search:

1. Activate the Multi-file Search option.

   If you haven't already activated the multi-file search options, do so now. See Multi-File Search Activation and Deactivation for more info.

2. Specify a project.

   If you do not have project open, open the `gnu_go.mcp` project included with the Core Tutorials. See Multi-File Search Pop-ups for more info.

3. Select a File Set.

   For this example, click the Sources checkbox. See Using a File Set for more info.

more…

Multi-File Search Actions (continued)

4. Perform the desired search action:

   The desired action is executed upon all files in the File Set. To learn how to perform a specific Find and Replace action, see:

   - Finding Text
   - Replacing Text
   - Replace & Find Text
   - Replacing All Text Occurrences

Adding & Removing Files

You can remove files from the file list to prevent them from being searched. In this step you remove the `count.c` file from the `gnu_go.mcp` file list.

To Remove a File from the File Set:

1. Select the file to remove.

   For this example, select the `count.c` file.

2. Press the Backspace/Delete key.

   The `count.c` file is removed from the file list. The next time you perform a search, the `count.c` file will not be included in the search files.

NOTE: You can reset the file list by clicking twice on the Sources checkbox. The first click removes all source files, the second rebuild the file list.

Adjusting Search Order

You drag the little arrow that appears in the file list to determine which file to search next. The next search starts with that file and continues to the end of the file list. If the **Wrap** option is enabled, the search wraps around to the first file in the list and stops at the selected file.

To Set the File to Search:

- Drag the file list arrow next to the file to start searching.

  For this example, drag the arrow until it points to the `exambord.c` file.

  If you click **Find** now, notice how the search begins at the exambord.c file and continues until the end of the file list is reached.

Summary

This concludes the Multi-File Find and Replace Actions stage of this tutorial.

In this stage you learned how to:

- Perform a Multi-file search
- Remove a file from the file list
- Start a search at a specific file in the file list

Now that you can identify and use Multi-File Find and Replace, its time to explore managing File Sets.

Using File Sets

This section of the tutorial identifies and describes the use of file sets. A file set is a simply a collection of files used by CodeWarrior's multi-file Find and Replace feature. Once you save a file set you can quickly open it at any time and set the search list to these files. The file list (and the file set), can include any file that CodeWarrior can open and edit: source files, header files, and any other text file.

In this section you will:

- Create a File Set
- Using a File Set
- Remove a File Set

Create a File Set

It's often helpful to save a specific group of files as a re-usable file set. This is easy to do with the following steps.

To Create a File Set:

1. Choose **Save a File Set** from the **File Sets** pop-up menu.

   The Save File Set window appears.

   more…

Create a File Set (continued)

2. Type in a name to identify this file set.

   For this example, enter the name "`Gnu_Go`".

3. Specify the file set scope setting.

   You can make this file set available to only the current project, or to all projects by enabling the appropriate checkbox. For this exercise, click the **Specific to this project** button.

4. Click **OK**.

   The IDE saves the new file set and closes the Save File Set dialog.

Using a File Set

Once you have created a file set, it is easy to use again. In this step you choose the `Gnu_Go` file set.

To Use a File Set:

- Choose the file set from the **File Sets** pop-up menu.

  The chosen file set replaces the current file set in the file list.

Remove a File Set

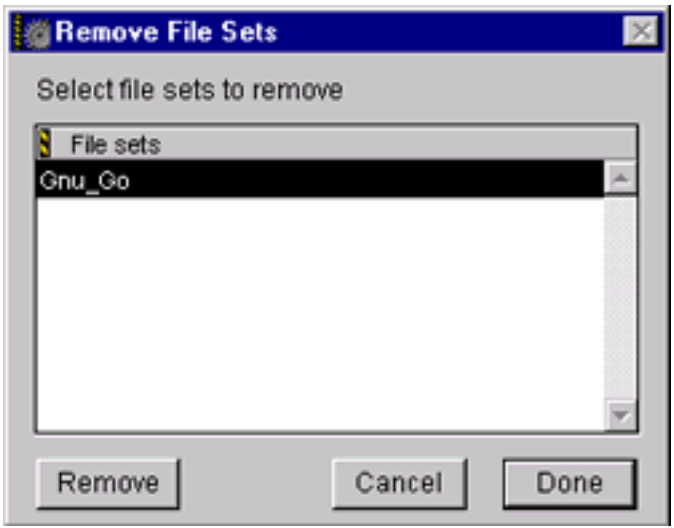
Sometimes it is necessary to remove a file set from the File Sets list. This is easy to accomplish with the following steps.

To Remove a File Set:

1. Choose **Remove a File Set** from the **File Sets** pop-up menu.

   The Remove File Sets window appears.

   more…



Remove a File Set (continued)

2. Select the file set to remove.

   Use the mouse or arrow keys to choose a file set by name from those presented in the Remove File Sets dialog. For this step, choose `Gnu_Go`.

3. Click **Remove**.

   The selected file set (`Gnu_Go`) disappears from the list.

4. Repeat Steps 2 and 3 for each file set you want to remove.

   If you have several file sets, you can remove as many as you want by repeating Steps 2 and 3. Close the Remove File Sets dialog when you have finished removing file sets.

Summary

This concludes the File Sets stage of this tutorial.

In this stage you learned how to:

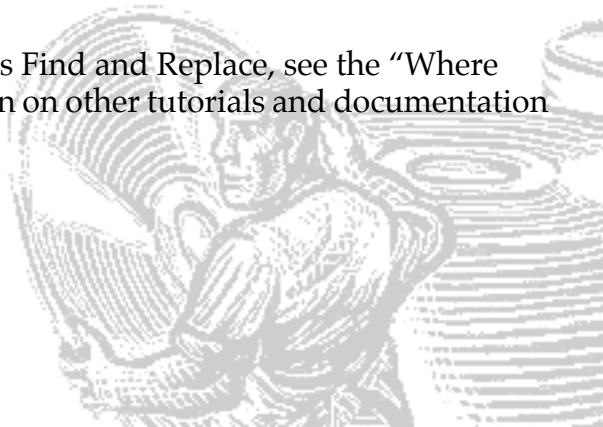
- Create a file set
- Use a file set
- Remove a file set

Conclusion

Congratulations!

You have completed the Find and Replace tutorial. You have learned how to use the Find window to search and replace strings in both single files and across multiple files, and you learned how to create, use, and remove file sets. While there is still more to learn, you've taken another step on your path to being a successful code warrior.

Now that you understand CodeWarrior's Find and Replace, see the "Where Else to Go Tutorials" slide for information on other tutorials and documentation available.



Technical Support

If you should encounter any difficulties with this guided tour, contact Metrowerks Technical Support for assistance. Please use the appropriate report form located in the Release Notes folder on the CD. They can be reached at:

`support@metrowerks.com`

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